

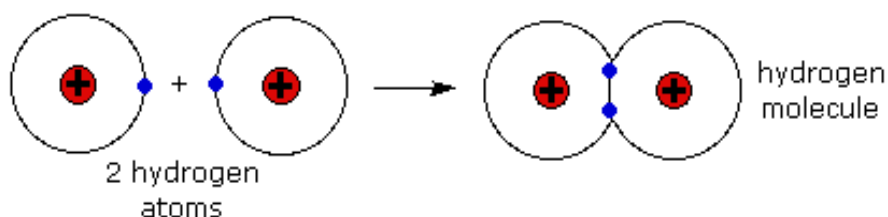
Covalent Bonds:

- The chemical bond that forms to hold 2 non-metal atoms together within a molecular compound.

~~✖~~ The bond allows the atoms to share a pair of electrons.

Example:

- Two molecules of hydrogen each containing 1 electron. To become stable they must share the two electrons.

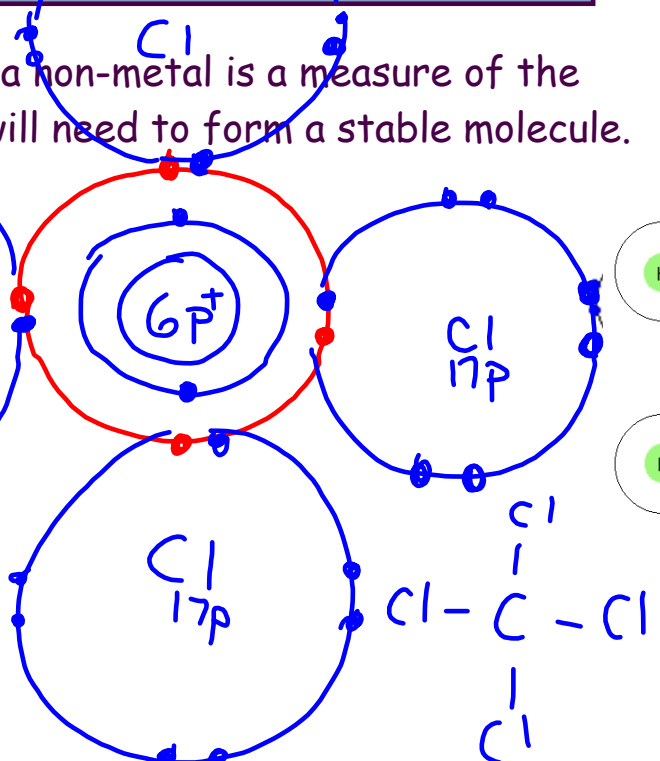
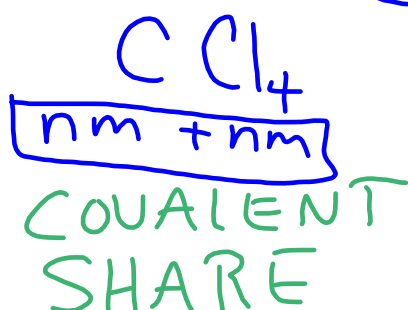


Combining Capacity:

- The **combining capacity** of a non-metal is a measure of the number of covalent bonds it will need to form a stable molecule.

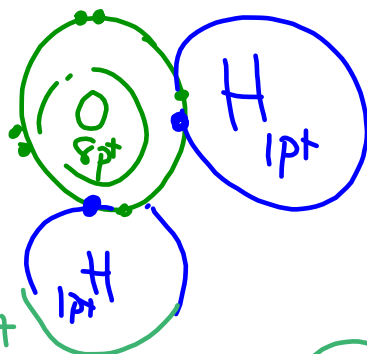
Examples:

- Carbon has a combining capacity of 4:
Ex: carbon tetrachloride

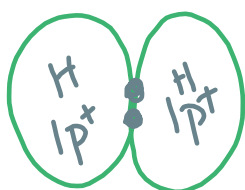


- Oxygen has a combining capacity of 2: $1+$ $2-$

Ex: Water H_2O



Ex: H_2
1 bond



- Nitrogen has a combining capacity of 3:

Ex: Ammonia

